the plan satisfied the applicable nondiscrimination requirements for target benefit plans for that prior year.

- (B) Initial theoretical reserve. Notwith-standing paragraph (b)(3)(iv)(B)(1) of this section, a target benefit plan under which the stated benefit formula takes into account service for an employee for plan years prior to the first plan year in which the plan satisfied this paragraph (b)(3), as permitted under paragraph (b)(3)(vii)(A) of this section, must determine an initial theoretical reserve for the employee as of the determination date for the last plan year beginning before such plan year under the rules of §1.401(a)(4)–13(e).
- (C) Satisfaction of prior law. In determining whether a plan satisfied the applicable nondiscrimination requirements for target benefit plans for any period prior to the effective date applicable to the plan under §1.401(a)(4)–13 (a) or (b), no amendments after September 19, 1991, other than amendments necessary to satisfy section 401(l), are taken into account.
- (viii) *Examples*. The following examples illustrate the rules in this paragraph (b)(3):

Example 1. (a) Employer X maintains a target benefit plan with a calendar plan year that bases contributions on a stated benefit equal to 40 percent of each employee's average annual compensation, reduced pro rata for years of participation less than 25, payable annually as a straight life annuity commencing at normal retirement age. The UP-84 mortality table and an interest rate of 7.5 percent are used to calculate the contributions necessary to fund the stated benefit. Required contributions are determined on the last day of each plan year. The normal retirement age under the plan is 65. Employee M is 39 years old in 1994, has participated in the plan for six years, and has average annual compensation equal to \$60,000 for the 1994 plan year. Assume that Employee M's theoretical reserve as of the last day of the 1993 plan year is \$13,909, determined under  $\S1.401(a)(4)-13(e)$ , and that required employer contributions for 1993 were determined using an interest rate of six percent.

- (b) Under these facts, Employer X's 1994 required contribution to fund Employee M's stated benefit is \$1,318, calculated as follows:
- (1) Employee M's fractional rule benefit is \$24,000 (40 percent of Employee M's average annual compensation of \$60,000).
- (2) The actuarial present value of Employee M's fractional rule benefit as of the

last day of the 1994 plan year is \$30,960 (Employee M's fractional rule benefit of \$24,000 multiplied by 1.290, the actuarial present value factor for an annual straight life annuity commencing at age 65 applicable to a 39-year-old employee, determined using the stated interest rate of 7.5 percent and the UP-84 mortality table, and assuming no mortality before normal retirement age).

- (3) The actuarial present value of Employee M's fractional rule benefit (\$30,960) is reduced by Employee M's theoretical reserve as of the last day of the 1994 plan year. The theoretical reserve on that day is \$14,744 the \$13,909 theoretical reserve as of the last day of the 1993 plan year, increased by interest for one year at the rate of six percent. Because the required contribution for the 1993 plan year is taken into account under  $\S1.401(a)(4)-13(e)(2)$  in determining the theoretical reserve as of the last day of the 1993 plan year, it is not added to the theoretical reserve again in this paragraph (b)(3) of this Example 1. The resulting difference is \$16,216 (\$30,960 - \$14,744).
- (4) The \$16,216 excess of the actuarial present value of Employee M's fractional rule benefit over Employee M's theoretical reserve is multiplied by 0.0813, the amortization factor applicable to a 39-year-old employee determined using the stated interest rate of 7.5 percent. The product of \$1,318 is the amount of the required employer contribution for Employee M for the 1994 plan year.

Example 2. (a) The facts are the same as in Example 1, except that as of January 1, 1995, the plan's stated benefit formula is amended to provide for a stated benefit equal to 45 percent of average annual compensation, reduced pro rata for years of participation less than 25, payable annually as a straight life annuity commencing at normal retirement age. For the 1995 plan year, Employee M's average annual compensation continues to be \$60,000. The mortality table used for the calculation of the employer's required contributions remains the same as in the prior plan year, but the plan's stated interest rate is changed to 8.0 percent effective as of December 31, 1995.

- (b) Under these facts, Employer X's required contribution for Employee M is \$1,290, calculated as follows:
- (1) Employee M's fractional rule benefit is \$27,000 (45 percent of \$60,000).
- (2) The actuarial present value of Employee M's fractional rule benefit as of the last day of the 1995 plan year is \$32,319 (\$27,000 multiplied by 1.197, the actuarial present value factor for an annuity commencing at age 65 applicable to a 40-year-old employee, determined using the stated interest rate of 8.0 percent and the UP-84 mortality table, and assuming no mortality before normal retirement age).